

Application No. 09/892,833
Amendment dated January 14, 2005
Reply to Office Action of October 20, 2004

REMARKS

Claims 1-15 are pending in the application; the status of the claims is as follows:

Claim 13 is objected to under 37 C.F.R. § 1.75(c) as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Claims 15 is objected to because of informalities.

Claims 1, 2, 4, 5, 7, and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,475,131 to Nishizawa et al (“Nishizawa”) in view of U.S. Patent No. 6,084,634 to Inagaki et al (“Inagaki”).

Claims 3, 6, and 9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Nishizawa and Inagaki as applied to claim 1 above, and further in view of U.S. Patent No. 5,053,876 to Blissett et al (“Blissett”).

Claims 3, 6, and 9-14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Nishizawa and Inagaki as applied to claim 1 above, and further in view of U.S. Patent No. 6,002,431 to Jung et al (“Jung”).

The acknowledgement, in the Office Action, of a claim for foreign priority under 35 U.S.C. § 119(a)-(d), and that the certified copy of the priority document has been received, is noted with appreciation.

The indication in the Office Action that the Examiner has objections to the drawings filed on June 27, 2001 under 37 C.F.R. § 1.121(d), is noted. A Replacement Sheet for Fig. 7 correcting FRAME is being submitted herewith.

Claim 13 has been amended to change claim dependency and claim 15 has been amended to change “bocks” to “blocks”. These changes are not necessitated by the prior

art, are unrelated to the patentability of the invention over the prior art, and do not introduce any new matter.

35 U.S.C. § 103(a) Rejections

The rejection of claims 1, 2, 4, 5, 7, and 8 under 35 U.S.C. § 103(a), as being unpatentable over Nishizawa in view of Inagaki, is respectfully traversed because the proposed combination fails to disclose, teach, or suggest all elements of the rejected claims.

Claim 1 requires *inter alia* “data read-out means for reading out pixel data of said specified plurality of pixels in a destructive manner before a main exposure and pixel data of said specified plurality of pixels in a nondestructive manner **during** said main exposure.” It is respectfully submitted that this is not taught by either Nishizawa or Inagaki. Nishizawa only teaches reading the photoelectric converter after a store operation, e.g., an exposure is complete. For example, in reference to Fig. 6, when a shutter release button is fully depressed

“the sensor cell 501 starts storage of the picture signal to be photographed and continues the storing operation until a proper amount of signals is stored. Then the signals thus stored are repeatedly read out by the aforementioned non-destructive readout operation into the visual display unit 201 at the first scanning speed 204, providing an image display on the display 507. The image thus displayed is a monitored image of the photographed image.” Column 6, lines 39-47.

That is, the sensor is exposed until the proper signal is stored and only then is the non-destructive read out performed.

Inagaki also teaches that the sensor is not read during the exposure of the sensor. For example, in Figs. 17 and 20 A/D output does not change while the shutter is open, indicating that the sensor data is not being read during that time period.

Thus, neither Nishizawa nor Inagaki teach “data read-out means for reading out ... pixel data of said specified plurality of pixels in a nondestructive manner **during** said main exposure” as required by claim 1. Accordingly, claim 1 distinguishes Nishizawa in view of Inagaki, and is allowable over the combination thereof.

Claim 2 depends from claim 1 and, therefore, distinguishes over the combination of Nishizawa and Inagaki for at least the same reasons as provided above in regards to claim 1.

Claim 4 recites *inter alia* “read-out means for reading out ... pixel data of said specified pixels in a nondestructive manner during said main exposure.” As applied above in regards to claim 1, the combination of Nishizawa and Inagaki fail to teach the claimed feature. Accordingly, claim 4 also distinguishes over Nishizawa in view of Inagaki.

Claim 5 depends from claim 4 and, therefore, distinguishes over the combination of Nishizawa and Inagaki for at least the same reasons as provided above in regards to claim 4.

Claim 7 recites *inter alia* “reading out ... said pixel data in a nondestructive manner during said main exposure.” It is respectfully submitted that the combination of Nishizawa and Inagaki fail to teach the claimed feature as applied above in regards to claims 1 and 4. Accordingly, claim 7 also distinguishes over Nishizawa in view of Inagaki.

Claim 8 depends from claim 7 and, therefore, distinguishes over the combination of Nishizawa and Inagaki for at least the same reasons as provided above in regards to claim 7.

Accordingly, it is respectfully requested that the rejection of claims 1, 2, 4, 5, 7, and 8 under 35 U.S.C. § 103(a) as being unpatentable over Nishizawa in view of Inagaki, be reconsidered and withdrawn.

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The rejection of claims 3, 6, and 9 under 35 U.S.C. § 103(a), as being unpatentable over Nishizawa and Inagaki as applied to claim 1 above, and further in view of Blissett, is respectfully traversed based on the following.

Claim 3 depends from claim 1 and, therefore, distinguishes over the combination of Nishizawa and Inagaki for at least the same reasons as provided above in regards to claim 1. It is respectfully submitted that Blissett also fails to teach or suggest reading pixel data from a sensor during exposure of the sensor. Indeed, Blissett teaches that two or more successive complete video frames are captured and processed. Accordingly, it is respectfully submitted that claim 3 distinguishes over the proposed combination of Nishizawa, Inagaki, and Blissett.

Claim 6 depends from claim 4 and, therefore, distinguishes over the combination of Nishizawa and Inagaki for at least the same reasons as provided above in regards to claim 4. It is respectfully submitted that as applied above in respect of claim 3, Blissett fails to supply the missing teaching. Because the combination fails to teach reading pixel data from the sensor during exposure of the sensor, claim 6 distinguishes over the combination of Nishizawa and Inagaki in view of Blissett.

Claim 9 depends from claim 7 and, therefore, distinguishes over the combination of Nishizawa and Inagaki for at least the same reasons as provided above in regards to claim 7. It is respectfully submitted that as applied above in respect of claim 3, Blissett fails to supply the missing teaching. Because the combination fails to teach reading pixel data from the sensor during exposure of the sensor, claim 9 distinguishes over the combination of Nishizawa and Inagaki in view of Blissett.

Accordingly, it is respectfully requested that the rejection of claims 3, 6, and 9 under 35 U.S.C. § 103(a) as being unpatentable over Nishizawa and Inagaki as applied to claim 1 above, and further in view of Blissett, be reconsidered and withdrawn.

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The rejection of claims 3, 6, and 9-14 under 35 U.S.C. § 103(a), as being unpatentable over Nishizawa and Inagaki as applied to claim 1 above, and further in view of Jung, is respectfully traversed based on the following.

As applied above in respect of claim 3, 6, and 9, the combination of Nishizawa and Inagaki fail to disclose, teach, or suggest a device or method wherein sensor pixel data is read during exposure of the sensor. It is respectfully submitted the Jung also fails to teach or suggest this claim element. Indeed, Jung provides no teaching whatsoever regarding how or when pixel data is read from a sensor, and only addresses image processing subsequent to image capture. Accordingly, it is respectfully submitted that claims 3, 6, and 9 distinguish over the proposed combination of Nishizawa, Inagaki, and Jung.

Claim 10 recites *inter alia* “read-out means for reading out data of pixels contained in said block of small area in said nondestructive manner during said exposure.” As applied above in respect of claims 3, 6, and 9 this claimed feature is not disclosed, taught, or suggested by the proposed combination of Nishizawa, Inagaki, and Jung. Accordingly, claim 10 distinguishes over the proposed combination.

Claim 11 depends from claim 10. It is respectfully submitted, therefore, that claim 11 distinguishes over the combination of Nishizawa, Inagaki, and Jung for at least the same reasons as provided above in regards to claim 10.

Claim 12 recites *inter alia* “read-out means for reading out data of pixels in a nondestructive manner during an exposure....” As applied above in respect of claims 3, 6, and 9 this claimed feature is not disclosed, taught, or suggested by the proposed combination of Nishizawa, Inagaki, and Jung. Accordingly, claim 12 distinguishes over the proposed combination.

Claim 13, as amended, depends from claim 12. It is respectfully submitted, therefore, that claim 13 distinguishes over the combination of Nishizawa, Inagaki, and Jung for at least the same reasons as provided above in regards to claim 12.

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Claim 14 recites *inter alia* “a step for reading out data of pixels in a nondestructive manner during an exposure.” As applied above in respect of claims 3, 6, and 9 this claimed feature is not disclosed, taught, or suggested by the proposed combination of Nishizawa, Inagaki, and Jung. Accordingly, claim 14 distinguishes over the proposed combination.

Accordingly, it is respectfully requested that the rejection of claims 3, 6, and 9-14 under 35 U.S.C. § 103(a) as being unpatentable over Nishizawa and Inagaki as applied to claim 1 above, and further in view of Jung, be reconsidered and withdrawn.

CONCLUSION

Wherefore, in view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are earnestly solicited.

This Amendment does not increase the number of independent claims, does not increase the total number of claims, and does not present any multiple dependency claims. Accordingly, no fee based on the number or type of claims is currently due. However, if a fee, other than the issue fee, is due, please charge this fee to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260.

If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed.

Any other fee required for such Petition for Extension of Time and any other fee required by this document pursuant to 37 C.F.R. §§ 1.16 and 1.17, other than the issue fee,

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and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.

Respectfully submitted,

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AMENDMENTS TO THE DRAWINGS:

The attached sheet of drawings includes changes to Fig. 7. This sheet, which includes Fig. 7, replaces the original sheet including Fig. 7.

Attachment: Replacement Sheet
Annotated Sheet Showing Changes

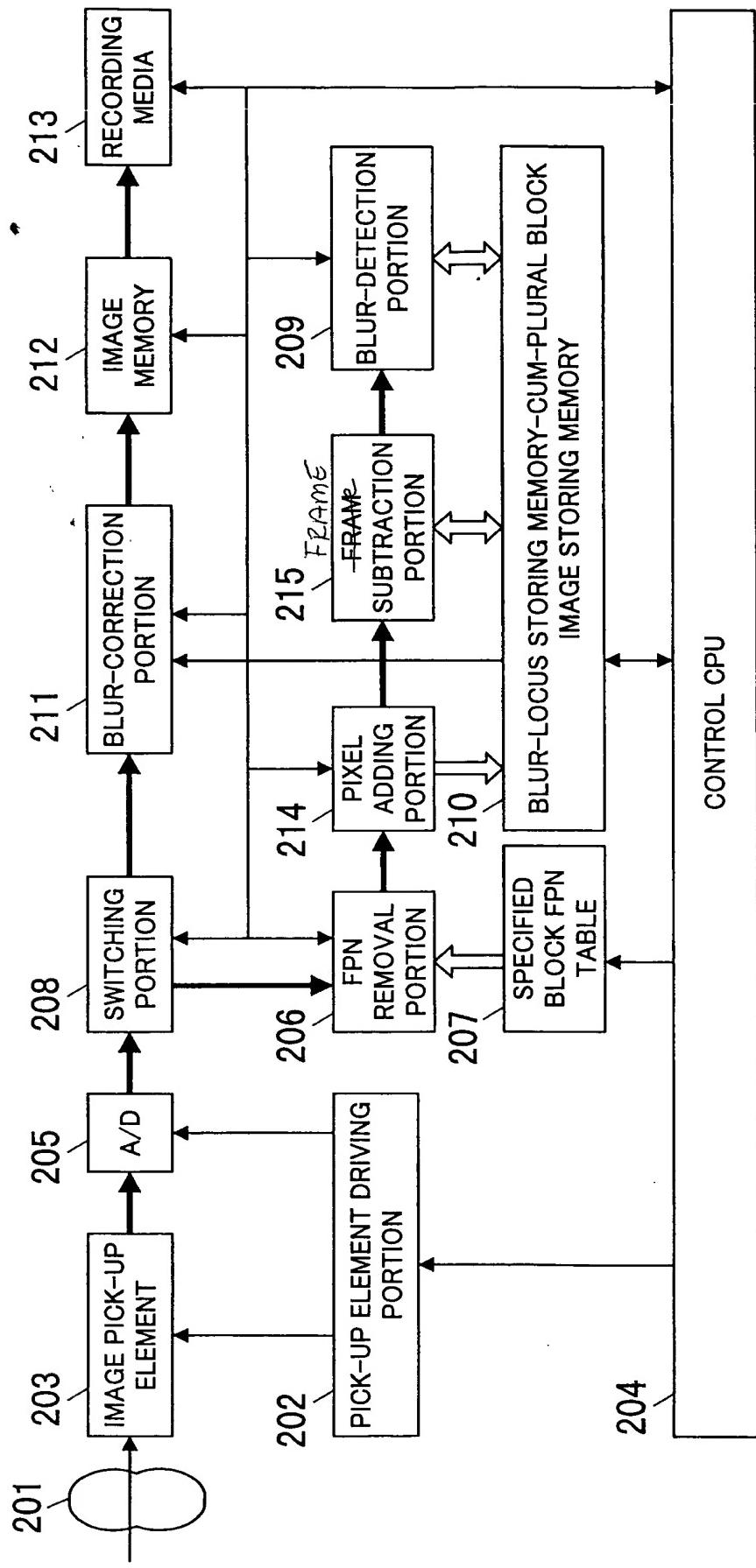


FIG. 7

